



January 16, 2008

Secretary of State Mike Coffman  
1700 Broadway, Suite 250  
Denver, Colorado 80290

Re: Request for reconsideration of Colorado Secretary of State decisions of December 17, 2007 regarding decertification of components of the Hart Voting System

Dear Secretary Coffman,

Pursuant to Section 1-5-621 (6), C.R.S. and Department of State Procedures and Guidelines of January 8, 2008, Hart InterCivic, Inc. (Hart) is submitting this request for reconsideration of Colorado Secretary of State decisions of December 17, 2007 regarding decertification of components of the Hart Voting System (HVS). Specifically, Hart InterCivic believes that a number of critical provisions of those decisions were based on invalid or incomplete information and are thus deserving of your reconsideration.

Following are the specific decertification decisions for which Hart is seeking reconsideration. In each case, the specific decision is followed by a list of the major factors upon which it appears the decision was based, general statements describing the grounds for reconsideration, and recommendations for recertification.

**1. The decertification of Central Count Scanners and Software, Ballot Now, Version Number 3.2.4.**

- a. *Failed to count ballots correctly; and,*  
*Failed to consistently scan ballots and generate consistent results.* This alleged failure appears to have been based on Ballot Now's incorrect or inconsistent detection and interpretation of "stray marks" in ballot option boxes. This is an invalid measure of Ballot Now's capability to count votes correctly, and alleged "failure rates" associated with this measure are inaccurate, misleading and have no statistical basis. The "stray mark" test simply exploits a sensitivity to tiny, inadvertent marks that occur extremely infrequently in actual elections.

The Ballot Now system accurately counts properly and improperly marked votes as Colorado rules require. Hart is unaware of any technically sound and statistically valid test by the Colorado Testing Board or any other

- official testing agency that has demonstrated otherwise. Any potential impact of “stray marks” can be, or already is being mitigated or eliminated by accomplishing manual review of the ballots prior to scanning, utilizing Ballot Now’s ballot resolution functionality, using correct system operating procedures, and maintaining system components in proper working order.
- b. *Failed to process ballots with more than one page.* Testing of Ballot Now’s capability to successfully process ballots with more than one page was deemed a failure due to “accuracy” being compromised by the “stray marks” issue noted above and operator error in selecting correct settings for processing multiple-page (sheet) ballots. This is an invalid assessment of this functionality for the Ballot Now system. Measures for mitigating or eliminating the “stray mark” issue for this alleged failure are the same as those noted above.
  - c. *Failed to accurately process folded ballots.* Testing of Ballot Now’s capability to successfully process folded ballots was deemed a failure due to Hart’s not providing usable folded ballots to complete the test. This is an invalid assessment of this functionality for the Ballot Now system, since the functionality was never actually tested.
  - d. *Failure to conduct State Requirements for Pre and Post Election Testing.* The Ballot Now system does accomplish Pre and Post Election Testing, but the system does not record and report all operations and input commands. This failure can be mitigated by implementing environmental and procedural security measures and keeping supplemental records of operations requiring special monitoring.
  - e. *Failure to provide auditable data to detect security violations.* The Ballot Now system provides auditable data for many critical operations performed by the application. This failure to meet some of the test requirements can be mitigated by implementing environmental and procedural security measures and keeping supplemental records of operations requiring special monitoring.
2. Hart InterCivic requests that the Central Count Scanners and Software, Ballot Now, Version Number 3.2.4 be recertified with the Conditions for Use recommended by the Testing Board with the following exceptions:
- a. Add a Central Count Scanner use condition that requires manual inspection of all paper ballots prior to scanning and application of Rule 27.1.3 of the Rules Concerning Uniform Ballot Counting Standards whereby ballots with “stray marks” may be assessed in the context of voter intent and, when necessary, be duplicated for processing and counting “due to...improper marking...which would prevent a ballot tabulating machine from accurately counting the ballot.”
  - b. Modify Central Count Scanner use condition “2) Ballot processing” and Software use condition 6) b) under “Election Database Creation and testing” to require only that jurisdictions report to the Colorado Secretary of State, any modifications made to standard default templates. Imposition of a “decision of the Testing Board” to unilaterally declare

- BOSS templates to be software and, as a consequence, to limit a jurisdiction's selection of ballot templates to those included in the Trusted Build prohibits jurisdictions from configuring ballot templates to accommodate various types of ballot data which they encounter from one type of election to the next. This restriction amounts to constructive decertification of the Ballot Now central count system, since it may not be usable for all types of elections.
- c. Modify Central Count Scanner use condition "6) Network Access/availability" to include authorization for direct connections between a Ballot Now Server and Ballot Now Client (used for ballot image processing and ballot resolution), as well as between the SERVO application and Hart Voting System devices requiring equipment management, system administration and/or audit functions.

### **3. The decertification of Precinct Scanner, eScan, Version Number 1.1.6.**

- a. *Failed to count ballots correctly; and, Failed to consistently scan ballots and generate consistent results.* This alleged failure appears to have been based on the eScan's incorrect or inconsistent detection and interpretation of "stray marks" in ballot option boxes. This is an invalid measure of the eScan's capability to count votes correctly, and alleged "failure rates" associated with this measure are inaccurate, misleading and have no statistical basis. As with Ballot Now, the "stray mark" test simply exploits a sensitivity to tiny, inadvertent marks that occur extremely infrequently in actual elections.

The eScan system accurately counts properly and improperly marked votes as Colorado rules require. Hart is unaware of any technically sound and statistically valid test by the Colorado Testing Board or other official testing agency that has demonstrated otherwise. Any potential impact of "stray marks" can be or is already being mitigated or eliminated by the eScan's voter-interactive ballot processing and by conducting effective poll worker training and voter education programs that emphasize specific instructions for marking voter selections on the ballot and interacting with the eScan voting device.

- b. *Failed to accurately process folded ballots.* Testing of the eScan's capability to successfully process folded ballots was deemed a failure due to Hart's not providing usable folded ballots to complete the test. This is an invalid assessment of this functionality for the eScan, since the functionality was never actually tested.
- c. *Failure to conduct State Requirements for Pre and Post Election Testing.* The eScan system does accomplish Pre and Post Election Testing, but the system does not record and report all operations and input commands. This failure can be mitigated by implementing environmental and procedural security measures and keeping supplemental records of operations requiring special monitoring.

- d. *Failure to provide auditable data to detect security violations.* The eScan system provides auditable data for many critical operations performed by the application. This failure to meet some of the test requirements can be mitigated by implementing environmental and procedural security measures and keeping supplemental records of operations requiring special monitoring.
4. Hart InterCivic requests that the Precinct Scanner, eScan, Version Number 1.1.6. be recertified with the Conditions for Use recommended by the Testing Board with the following exceptions:
- a. Add a Precinct Count Scanner use condition that requires jurisdictions to implement focused poll worker training and voter education programs. These programs would emphasize: specific instructions for marking voter selections on the ballot, reviewing and interpreting information presented on the eScan screen, procedures for interacting with the eScan voting device, and special operations such as identifying and spoiling an improperly marked ballot.
  - b. Modify Precinct Count Scanner use condition “2) Ballot processing” to require only that jurisdictions report to the Colorado Secretary of State, any modifications made to standard default templates. Imposition of a “decision of the Testing Board” to unilaterally declare BOSS templates to be software and, as a consequence, to limit a jurisdiction’s selection of ballot templates to those included in the Trusted Build prohibits jurisdictions from configuring ballot templates to accommodate various types of ballot data which they encounter from one type of election to the next. This restriction amounts to constructive decertification of the eScan system, since it may not be usable for all types of elections.
  - c. Change Precinct Count Scanner use condition 4) a) under “Device security accessibility” to require that jurisdictions insure that all eScan passwords are changed for each election. This requirement for all jurisdictions to have and use BOSS software will increase significantly the risk of errors being introduced into the election processes of small jurisdictions that do not have the opportunity or personnel resources to develop and sustain proficiency in the use of the BOSS application. Additionally, such a requirement will place a very significant financial burden on smaller jurisdictions, many of which may find to be cost prohibitive.
  - d. Modify Global use condition 5) c) to require that all jurisdictions have, as a minimum, the Tally and SERVVO software components of the Hart Voting System. The basis of this recommendation is the same as stated in the previous sub-paragraph.
5. **The recertification of DRE, eSlate, Version Number 4.0.19, and components JBC Units (4.0.19) and VBO Units (1.7.5) with the following conditions for use is constructively equivalent to decertification for the reasons noted.**

- a. DRE use condition “3) Ballot processing” imposes a “decision of the Testing Board” to unilaterally declare BOSS templates to be software and as a consequence, to limit a jurisdiction’s selection of ballot templates to those included in the Trusted Build. This restriction prohibits jurisdictions from configuring ballot templates to accommodate various types of ballot data which they encounter from one type of election to the next.
  - b. Software use condition 6) b) under “Election Database Creation and testing” imposes the same restriction on template use as noted in the previous sub-paragraph.
  - c. Software use condition 1) c) under “System/database/network security hardening” imposes a requirement to create either separate consolidated reports or separate Tally databases for each Mobile Ballot Box memory card to be tabulated on Election Night. This requirement is impractical for larger jurisdictions that may have hundreds of MBBs to process, given other available audit options that are more efficient and equally as secure.
  - d. Global use condition 5) c) under “Trusted Build Verification” imposes a requirement for all jurisdictions “to have all necessary software components in the operating possession of the county clerk and recorder. This will at a minimum include the software components for BOSS, Tally and SERVO.” This requirement for all jurisdictions to have and use the BOSS software application will increase significantly the risk of errors being introduced into the election processes of small jurisdictions that do not have the opportunity or personnel resources to develop and sustain proficiency in the use of the BOSS application. Also, such a requirement will place a very significant financial burden on smaller jurisdictions, many of which may find to be cost prohibitive.
6. Hart InterCivic requests that the DRE, eSlate, Version Number 4.0.19, and components JBC Units (4.0.19) and VBO Units (1.7.5) be recertified with the Conditions for Use recommended by the Testing Board with the following exceptions:
- a. Modify DRE use condition 3) and Software use condition 6) b) to require only that jurisdictions report to the Colorado Secretary of State, any modifications made to standard default templates.
  - b. Modify Software use condition 1) c) to allow larger jurisdictions (for example, those with more than 50 Mobile Ballot Box memory cards to be processed on Election Night) the option to submit plans to the Colorado Secretary of State for approval to use an alternative method of auditing election results.
  - c. Modify Global use condition 5) c) to require that all jurisdictions have, as a minimum, the Tally and SERVO software components of the Hart Voting System.

Additional supporting information will be provided by supplementary documentation to be provided at or before the public hearing on this request. Please note also, that Hart InterCivic intends to notify the Secretary of State of

issues related to use conditions imposed on recertified components and request his modification or removal of such conditions pursuant to Section 1-5-621 (7), C.R.S.

I have designated Travis Harrell, Director of Operations, Election Solutions, as the point of contact for all matters pertaining to this process. He can be reached as follows:

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Director of Operations, Election Solutions  
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Thank you for your consideration of this request.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "P. Braithwaite", written in a cursive style.

Phillip Braithwaite  
Senior Vice President and General Manager, Election Solutions